

WHAT IS CLAIMED IS:

1. A decoder for temporarily storing in a buffer memory in sector units digital data having a predetermined number of bytes processing the digital data by correcting and detecting code errors included in the digital data, and transferring the processed digital data, the decoder comprising:

10 a check head register for storing a first address of the buffer memory when the storing of the processed digital data to the buffer memory is started;

15 a check sector counter for counting the number of sectors of the processed digital data stored in the buffer memory to generate a count value;

20 a command decision circuit connected to the check head register and the check sector counter for deciding whether the digital data requested to be transferred is stored in the buffer memory based on the first address, the count value, and a head address of the digital data requested to be transferred; and

25 a command register connected to the command decision circuit for storing a data transfer request command, wherein the command decision circuit permits the decoder to transfer the processed digital data when deciding that the digital data requested to be transferred is stored in the buffer memory.

30 2. The decoder according to claim 1, wherein the count value corresponds to an address interval of the processed digital data occupying the buffer memory, and wherein the command decision circuit adds the address interval to the first address to generate a comparison address and decides whether the digital data requested to be transferred is

stored in the buffer memory by comparing the comparison address and the head address of the digital data that is requested to be transferred.

5           3. The decoder according to claim 2, wherein the command register stores the data transfer request command that includes address information, wherein the command decision circuit decides the head address of the digital data requested to be transferred based on the address  
10          information.

15          4. The decoder according to claim 2, wherein the command decision circuit decides the head address of the digital data that is requested to be transferred based on address information received from an external microcomputer.

5. The decoder according to claim 1, wherein the decoder is a CD-ROM decoder.

20          6. The decoder according to claim 1, wherein the decoder is a DVD decoder.